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(136922003800)**REMARKS**

Claims 1-3, 5-7, 9-12, 14-16, 18-20, 22, 23 and 25-29 were pending in the application and all stand rejected.

Claims 1-7, 9-12, 14-16, 18-20 and 28 all stand rejected under 35 USC §112, second paragraph due to the use of the term "rapid" which the Examiner said was a relative term.

The Examiner also pointed out the use of the term "generally" in Claim 20 as resulting in the rejection of Claim 20.

First, as to the term "generally" it was intended to delete this from Claim 20 earlier and that is done in the present amendment. The term "generally" also appeared in Claim 11 and has also been deleted therefrom here.

As regards the term "rapid", this is discussed below. It is respectfully submitted that even if arguendo this earlier rejection citing "rapid" was appropriate, it is overcome by the present amendments.

The bulk of the claims stand rejected under §102 as anticipated by Hogan.

Claims 2 and 10 stand rejected under §103 as unpatentable over Hogan in view of Newman and Claim 22 stands rejected under §103 as unpatentable over Hogan in view of Tanaka.

The Examiner is thanked for his detailed comments explaining his rejection and his Response to Arguments, which clarify the earlier rejections.

Each of the independent claims has been amended to recite additional subject matter reading on, e.g., paragraph 65 of the published specification. In pertinent part, paragraph 65 states:

If the DSV has a rapid rate of change over a significant period of time or if the DSV has substantial low frequency components then the transitions in the EFM signal may be shifted from their ideal values and/or

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the ability of tracking and focus circuits in CD drives to maintain optimal head positioning may be compromised. This typically causes read failures from the CD.

As to the significance of the DSV and its rate of change, as well known the 1's and 0's whose DSV is being chosen are conventionally represented as a sine wave signal output by the laser read head which is reading the pits and lands on the CD. The DSV's rate of change is the slope of this sine wave which varies between the DC level and its maximum amplitude, which can be a high value. The sine wave may have other components which are a frequency other than the sine wave's fundamental frequency. It has been found by the present inventor that also introducing low frequency components into the DSV sine wave is effective in causing DSV problems.

The present independent claims as amended are directed to this and specifically to the embodiment having the rapid rate of change of DSV. As pointed out in the Summary of the present application (paragraph 17) "In this respect, it is currently thought that it is the rate of change of DSV, rather than the absolute values thereof, which are most effective in causing the DSV problem." Hence the independent claims are now directed to this rapid rate of change.

It is respectfully submitted that the present amendment overcomes the 35 USC §112 second paragraph rejection where the Examiner said "...the term "rapid" is a relative term which renders the claims indefinite. The term "rapid" is not defined by the claim. The specification does not provide a standard for ascertaining the requisite degree..." It is respectfully submitted that as amended Claim 1, which incorporates above quoted subject matter of paragraph 65, does indeed define the term "rapid" with sufficient particularity in terms of the resulting effects so one of ordinary skill in the art is apprised of the scope of the invention. Hence this overcomes the §112 rejection involving the term "rapid".

Additionally Claim 1 was rejected citing Hogan. The Examiner pointed out that in his opinion Hogan meets the aspect of the rapid rate of change of the DSV, citing Hogan, column 3, lines 48-60, column 5, lines 64 to column 6, line 25, and Figures 3A, 3B, 3C and 3D.

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It is respectfully submitted that is not accurate. First, it is not seen where any particular rate of change of the DSV value is shown in any of Hogan Figs. 3A to 3D. Especially, it is not seen or suggested that any rate of change in Hogan departs from that which is normal or standard for CD data which is easily readable. Even if arguendo these portions of Hogan do suggest to the Examiner there is some rate of change in the Hogan DSV, they certainly do not disclose the rate of change as now recited in Claim 1. Specifically, Claim 1 now recites in conformance with the specification, paragraph 65 "the data patterns of the authenticating signature are arranged to have a DSV (digital sum value) which has a rapid rate of change over a significant period of time wherein the transitions in the EFM (eight to fourteen modulation) signal from the data patterns are shifted from their ideal values or the ability of disc drives to maintain optimal head positioning is compromised". It is not seen where this is set forth in any portion of Hogan cited by the Examiner.

Taking each of the Examiner's citations to Hogan one by one (see page 3 of the Action, lines 10 and 11) Hogan, column 3, lines 48-60 is silent about any rate of change but refers to, see column 3, lines 57 and following "...placing the encoder into a state that prevents a long term propagation of states leading to a large accumulated DSV." Hence this points to a large DSV value rather than a rapid rate of change in the DSV values over time.

Next, Examiner cites Hogan column 5, line 64 carrying over to column 6, line 25. Again this passage is silent about any particular rate of change in the DSV. Instead this passage appears again to be about the size (value) of the DSV, see column 6, line 6 "In each case, the magnitude of DSV is smaller for the standard encoder...". Further at the end of that paragraph, Hogan states "...DSV accumulates in a negative direction indefinitely, as illustrated in Fig. 3b." Again, this points to a large value of DSV rather than to any rapid or other particular rate of change.

Hogan Figs. 3A, 3B, 3C and 3D do not contain any relevant text but show the DSV going up and down and in Fig. 3B generally having a downwards trend, but again no particular rate of change is indicated, especially of the magnitude or intended to have the effects as recited in present Claim 1.

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Hence Claim 1 as amended clearly distinguishes over Hogan and is patentable.

Claims 2, 3, 5, 6, 7, 9 and 10 depend on Claim 1. These claims are patentable over Hogan at least for the same reasons as the base claim. Moreover Claim 5 has been amended to recite "additionally" because Claim 5 recites an aspect in addition to that of Claim 1. Hence Claim 5 is amended as to form rather than for reasons of patentability and the present Claim 5 amendment is not intended to be further limiting.

Claim 9 additionally distinguishes over Hogan in reciting "a substantial low frequency component." No such feature is found in Hogan, so Claim 9 thereby distinguishes thereover. As pointed above, this feature, in addition to the "rapid rate of change" of the DSV, causes additional DSV problems.

Claim 11 has been amended essentially identically to Claim 1 and is directed to the copy protected disc which would typically be the disc resulting from the process of Claim 1. Hence Claim 11 is patentable over Hogan at least for the same reasons as Claim 1.

Claims 12, 14, 15, 16, 18 and 19 are dependent upon Claim 11 and hence patentable for at least for the same reasons as the base claim. Claim 18 is directed to the "substantial low frequency component" and additionally distinguishes over Hogan for the same reasons as Claim 9.

Claim 20 is also directed to a method similar in most respects to that of Claim 1 but instead involving the authenticating process. Note that Claim 20 has been amended identically to Claim 1 in terms of reciting the nature of the DSV rapid rate of change, and thereby distinguishes over Hogan.

On page 10 of the action the Examiner requested clarification as to whether Applicant wishes the preambles of Claims 20, 22 and 23 to carry patentable weight. Since each of the preambles of these claims has been amended as to more than form, and the amendments were earlier and again now are pointed out to support patentability, it is understood that amendatory features in

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the preambles of these claims are intended to carry patentable weight. Hence Claim 20 is allowable over Hogan at least for the same reasons as pertain to Claim 1.

Claim 22 is directed to a process for enabling mastering of an optical disc. Claim 22 has been amended in its preamble and now recites similar aspects as Claim 1 with regard to the DSV rapid rate of change and the resulting effects. Hence Claim 22 is allowable over Hogan at least for the same reasons as Claim 1.

Claim 23 has been amended identically to Claim 22 and hence also is allowable over Hogan. The remaining claims dependent upon Claim 23 are Claims 25, 26, 27 and 29 which are allowable for at least for the same reasons as the base claim. Note that dependent Claim 28 (now canceled) earlier recited the DSV rapid rate of change. Claim 29 recites similar subject matter as Claims 9 and 18 and so similarly additionally distinguishes over Hogan.

Hence all pending claims are now believed to be allowable and allowance thereof is requested. An RCE accompanies this paper, so this amendment is entitled to entry and the claims entitled to examination.

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(136922003800)**CONCLUSION**

Therefore it is respectfully submitted that all currently pending claims are now in condition for allowance and allowance thereof is requested. This amendment is accompanied by an RCE and so is entitled to entry.

In view of the above, all presently pending claims in this application are believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

This paper is filed under Rule 34. The correspondence address remains that of Macrovision Corporation.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to the undersigned's Deposit Account No. 03-1952 referencing docket no. 136922003800.

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Respectfully submitted,

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